

To ship Dec 14 or sooner.

Work Order ID 138554

138554

Page 1

Item ID: D4410-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Face Plate

Start Date: 11/2/2015 Start Qty: 4.00

4

Cust Item ID:

Required Date: 11/23/2015 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

SA

Date: 2015 11 02

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4410

E

100

0.00

100

Waterjet

FLOW CNC Waterjet

Memo

CUT AS PER DWG

DWG REV: E

PROG REV: E

DEBURR

0.00

4

12/15/11/03

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

4

12/15/11/03

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Work Order ID 138554

November 02, 2015 2:04:42 PM

138554

Page 2

Item ID: D4410-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Face Plate
Start Date: 11/2/2015 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 11/23/2015 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	QC8- Inspect parts - second check	0.00							
-----	-----------------------------------	------	--	--	--	--	--	--	--

130

QC

Memo

0.00

Quality Control

DAS
38
9-89

NOV 03 2015

170	Outsource process-Anodize per QSI017 4.1.10.1	0.00							
-----	---	------	--	--	--	--	--	--	--

170

Outsource4

Memo

12.00

Outsource process - Anodize

Issue P/O: **30385**
Black Anodize as per Dwg D4410

C OF C IS REQUIRED

CY NOV 06 2015

4

180	Receive & Inspect for Damage & Mat'l Certs	0.00							
-----	--	------	--	--	--	--	--	--	--

180

Packaging

Memo

0.00

Packaging

4x 8015-12-01

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																				
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																
Description Work Order Deviation				Disposition																																																																			
Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Pressure/Forced ☐</td> <td style="width:15%;">Temperature/Cure ☐</td> <td style="width:15%;">Power Loss/Surge ☐</td> <td style="width:15%;">Positioned Wrong ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Environment ☐	No Re-verification ☐																																																																						
Design ☐	Operator ☐																																																																						
Doc/Data ☐	Offset/Setup ☐																																																																						
Equip/Tooling ☐	Supplier ☐																																																																						
Handling/Pre ☐	Training ☐																																																																						
Material ☐	Use for Testing ☐																																																																						
Internal Transport ☐	Poor Information ☐																																																																						
Tribal Knowledge ☐	Rushing ☐																																																																						
LOA ☐	Product Improvement ☐																																																																						
Substation ☐	Process Improvement ☐																																																																						
Past Expiry Date ☐	Manufacturing Process ☐																																																																						
Misidentified ☐	Past Due ☐																																																																						
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																				
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																				
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																				
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																				
Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																				
Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																				
Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																				
Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																				
Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																				
Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																				
		OTHER : _____																																																																					

Work Order ID 138554

November 02, 2015 2:04:42 PM

138554

Page 3

Item ID: D4410-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Face Plate
Start Date: 11/2/2015 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 11/23/2015 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
190									
QC	Memo	0.00							
Quality Control									DEC 01 2015
220	Identify as per dwg & Stock Location: Stops	0.00							
220	Packaging								
Packaging	Memo	0.00							
Packaging									
230	QC21- Final Inspection - Work Order Release	0.00							
230									
QC	Memo	0.01							
Quality Control									

15/12/2015

MCS DEC 02 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																		
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																																							
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																																							
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																																							
Large Fab ☐	Composite ☐	Supplier ☐																																																																																								
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																			
Description Work Order Deviation				Disposition																																																																																						
<table style="width:100%; border: none;"> <tr> <td colspan="4" style="text-align: center; vertical-align: top;"> Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table> </td> <td colspan="5" style="text-align: center; vertical-align: top;"> FAULT CATEGORY <table style="width:100%; border: none;"> <tr><td>☐ Pressure/Forced</td><td>☐ Temperature/Cure</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr> <tr><td>☐ Bending</td><td>☐ Set-up</td><td>☐ Folio/Program</td><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Centre Not Concentric</td><td>☐ BOM/Route</td><td>☐ Grain</td><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Part Incorrect</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Out of Sequence</td><td>☐ Part Moved</td></tr> <tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Off-set</td><td>☐ Drawing</td></tr> <tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Mislabeled</td><td>☐ Finish</td></tr> <tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Fit/Function</td><td>☐ Misread</td></tr> <tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Misaligned/off center</td><td>☐ Turning Sequence</td></tr> </table> </td> </tr> <tr> <td colspan="4"></td> <td colspan="5" style="text-align: center;">OTHER :</td> </tr> </table>									Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>				Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr><td>☐ Pressure/Forced</td><td>☐ Temperature/Cure</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr> <tr><td>☐ Bending</td><td>☐ Set-up</td><td>☐ Folio/Program</td><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Centre Not Concentric</td><td>☐ BOM/Route</td><td>☐ Grain</td><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Part Incorrect</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Out of Sequence</td><td>☐ Part Moved</td></tr> <tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Off-set</td><td>☐ Drawing</td></tr> <tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Mislabeled</td><td>☐ Finish</td></tr> <tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Fit/Function</td><td>☐ Misread</td></tr> <tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Misaligned/off center</td><td>☐ Turning Sequence</td></tr> </table>					☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence					OTHER :				
Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>				Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr><td>☐ Pressure/Forced</td><td>☐ Temperature/Cure</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr> <tr><td>☐ Bending</td><td>☐ Set-up</td><td>☐ Folio/Program</td><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Centre Not Concentric</td><td>☐ BOM/Route</td><td>☐ Grain</td><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Part Incorrect</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Out of Sequence</td><td>☐ Part Moved</td></tr> <tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Off-set</td><td>☐ Drawing</td></tr> <tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Mislabeled</td><td>☐ Finish</td></tr> <tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Fit/Function</td><td>☐ Misread</td></tr> <tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Misaligned/off center</td><td>☐ Turning Sequence</td></tr> </table>					☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence																		
Environment ☐	No Re-verification ☐																																																																																									
Design ☐	Operator ☐																																																																																									
Doc/Data ☐	Offset/Setup ☐																																																																																									
Equip/Tooling ☐	Supplier ☐																																																																																									
Handling/Pre ☐	Training ☐																																																																																									
Material ☐	Use for Testing ☐																																																																																									
Internal Transport ☐	Poor Information ☐																																																																																									
Tribal Knowledge ☐	Rushing ☐																																																																																									
LOA ☐	Product Improvement ☐																																																																																									
Substation ☐	Process Improvement ☐																																																																																									
Past Expiry Date ☐	Manufacturing Process ☐																																																																																									
Misidentified ☐	Past Due ☐																																																																																									
☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong																																																																																							
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions																																																																																							
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance																																																																																							
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect																																																																																							
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																																																																							
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved																																																																																							
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing																																																																																							
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish																																																																																							
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread																																																																																							
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence																																																																																							
				OTHER :																																																																																						

Picklist Print

November 02, 2015 2:04:48 PM

Page 1

Work Order ID: 138554

138554

Parent Item: D4410-5

D4410-5

Parent Item Name: Face Plate

Start Date: 11/2/2015

Required Date: 11/23/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 11-11-02 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased			No		sf	164.0000		0.378947			

M6061T6S 040

6061-T6 .040 Sheet

on 15/11/03

Location

Loc Qty

Loc Code

MAT021

164

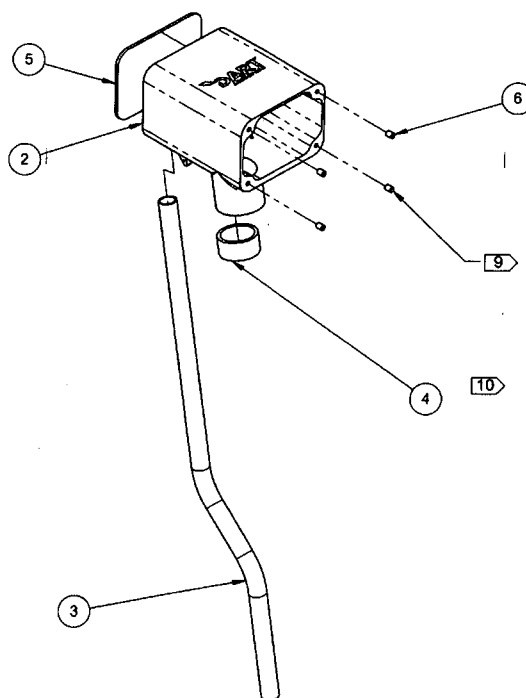
m131352

64

m132037

100

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4410-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-11	205 SHIM
5	1	D4410-15	REAR COVER
6	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)



RELEASED

2015 JUL 02 ECU 15-577
A.P.

20151102

D4410-041 WELDING DETAIL

REV.	DESCRIPTION	BY	DATE
E	REVISE DIMS, ZN D5-7, D6-7, D7-4, C6-4, D6-4, C8-4, D5-4, C6-5, B7-6, B6-6, B4-6, C4-6, B6-7, B5-7, C4-7, ADD DIM D5-9, REMOVE PIN FROM BOM, ZN D5-1, D5-2, D5-3, REVISE NOTES, ZN A6-2, A6-3, A6-4, REVISE NECK LENGTH AND REMOVE MOUNTING HOLE, ZN C6-4, REMOVE MOUNTING HOLE, ZN C5-10, C5-11	VS	15.05.28
D	REVISE TRIGGER SHAPE, ZN A5-9, REVISE C'BORE, ZN A6-4, REVISE HOLE DIM, ZN D5-6	VS	14.10.14
C	ADD HOLE DIM, ZN C6-7; UPDATE LOGO, ZN C2-5; UPDATE NOTE 8, ZN A6-5; REVISE CAPTION, ZN B2-1; ADD WELDING DETAIL, ZN C2-2, ZN C2-3	VS	14.02.20
B	ADD C'BORE, ZN A4-2, ENLARGE HOLES, ZN C5-3 & B8-3, UPDATE LOGO, ADD -049/-11/-13/-15, ROTATE HOLE, ZN C3-2, INCREASE 7 DIAMETER, ZN C1-6, REMOVE -9 FROM -041 ASSEMBLY, ZN C5-1	DC	12.07.30
A	NEW ISSUE	DC	11.06.08

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.57 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING
- 10) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

D4410-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)

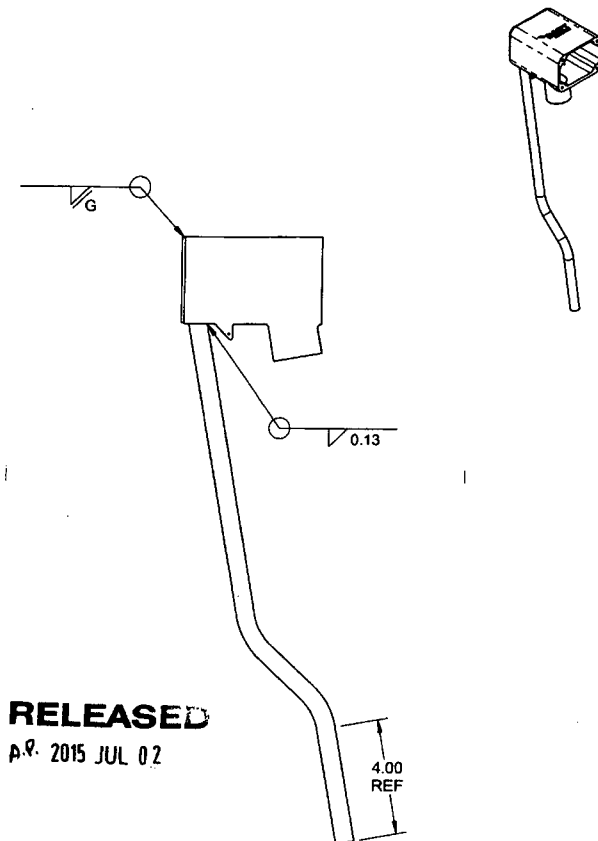
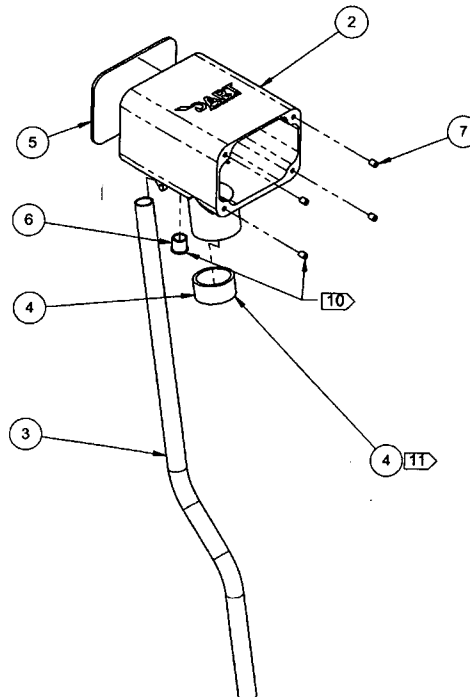
APPROVED

5H 138554

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA
DRAWN	VS	
CHECKED	RF	DRAWING NO. D4410
MFG. APPR.	EPDMA	REV. E
APPROVED	HS	SHEET 1 OF 12
DE APPR.	DS	SCALE
DATE	15.05.28	CO-PILOT COLLECTIVE HEAD NTS

COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE SUPPLIER'S CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

ITEM NO.	QTY. -043	PART NUMBER	DESCRIPTION
1	X	D4410-043	CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-13	212 SHIM
5	1	D4410-15	REAR COVER
6	1	D4413-1	DOME PLUG
7	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)



RELEASED

A/R 2015 JUL 02

D4410-043 WELDING DETAIL

NOTES:

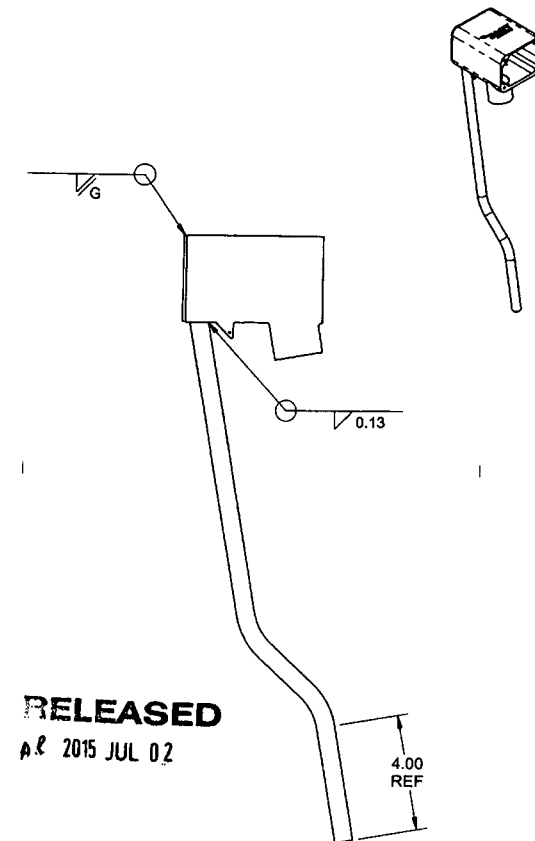
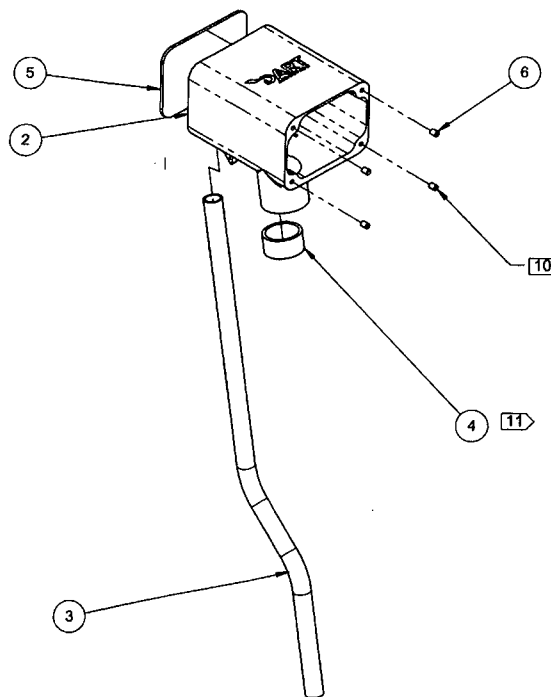
- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.57 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING
- 10) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

D4410-043 CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 2 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMING OR COMMINGLED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

ITEM NO.	QTY. -045	PART NUMBER	DESCRIPTION
1	X	D4410-045	CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-13	212 SHIM
5	1	D4410-15	REAR COVER
6	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)



RELEASED
AR 2015 JUL 02

D4410-045 WELDING DETAIL

NOTES:

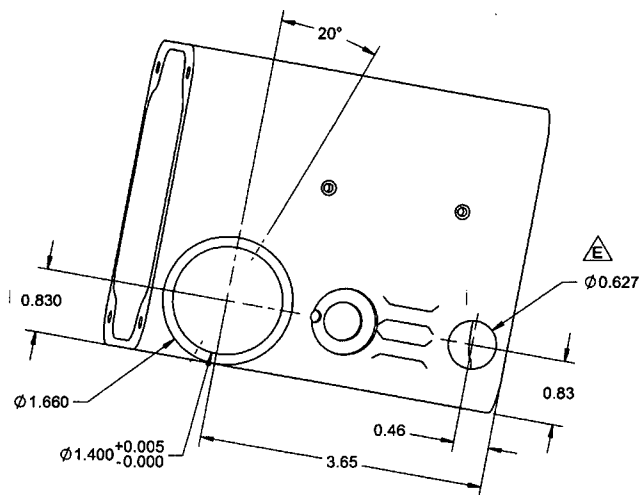
- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.57 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING
- 10) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

D4410-045 CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)

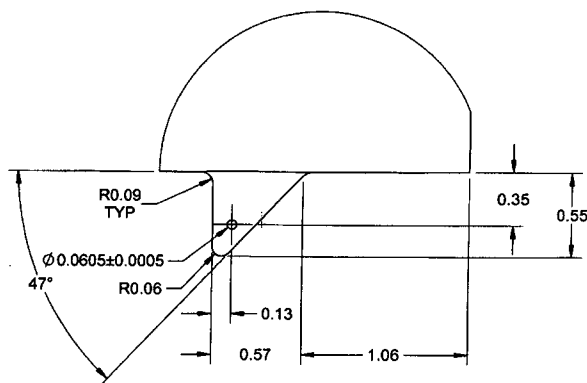
APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 3 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR COPIED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

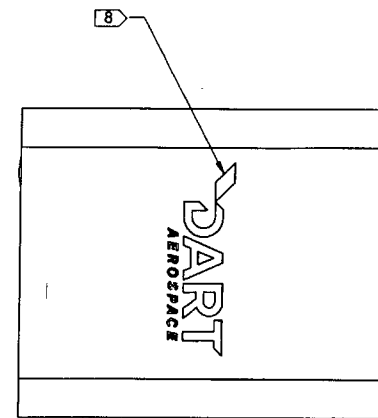
COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT
NOT BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT



VIEW A-A
C5-4



DETAIL B
C4-4



VIEW C-C
D4-4

**D4410-1 CO-PILOT COLLECTIVE HEAD
DETAIL VIEWS**

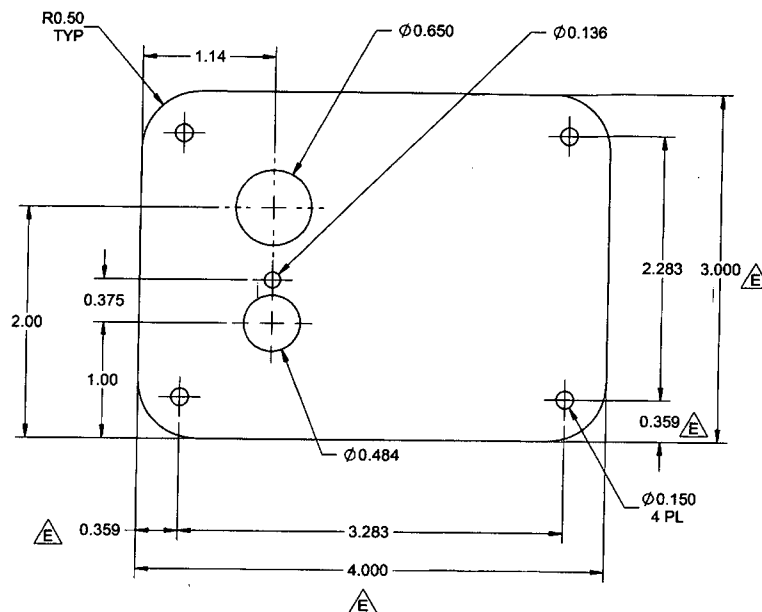
RELEASE
A.R. 2015 JUL 02

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) ENGRAVE "DART" LOGO AS SHOWN 0.003 - 0.005 DP.

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 5 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D4410-3 FACE PLATE

NOTES:

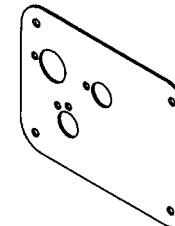
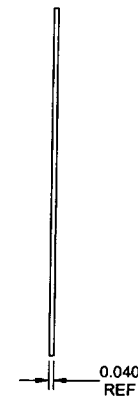
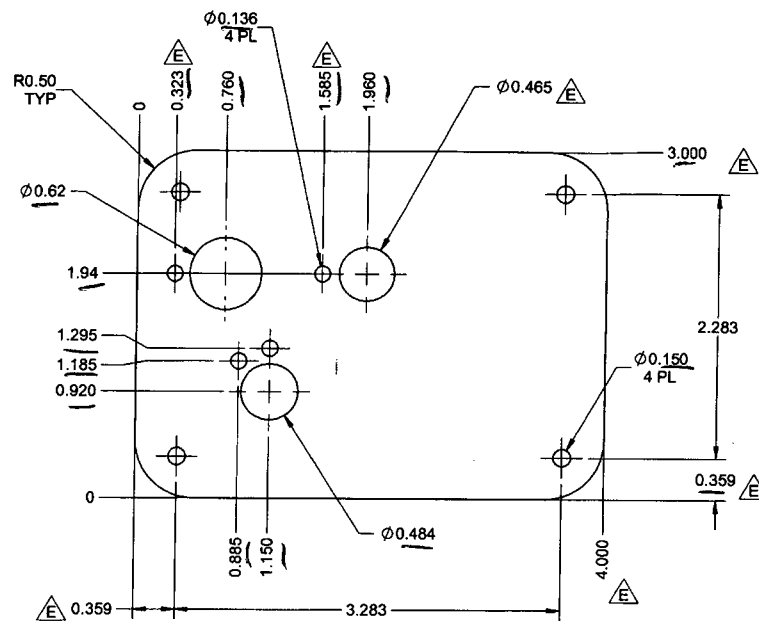
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.040
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

RELEASED

AR 2015 JUL 02

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 6 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D4410-5 FACE PLATE

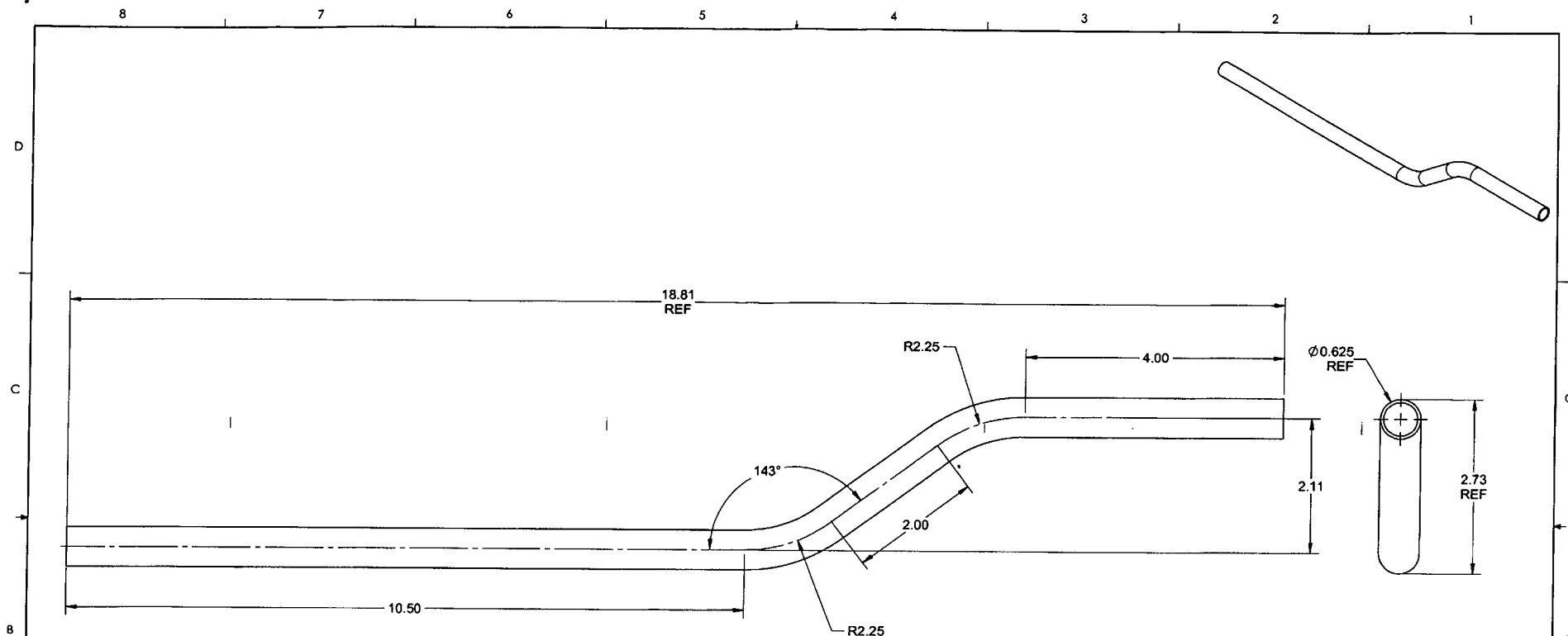
NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.040
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

RELEASE
AR 2015 JUL 02

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 7 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D4410-7 CONDUIT

RELEASE
 2015 JUL 02

NOTES:

- 1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM TUBING PER
 WW-T-700/6 OR AMS 4080 OR AMS 4082
 OR QQ-A-200/8 OR QQ-A-225/8
 REF. DART SPEC. M6061T60.625W.050
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.17 lbs

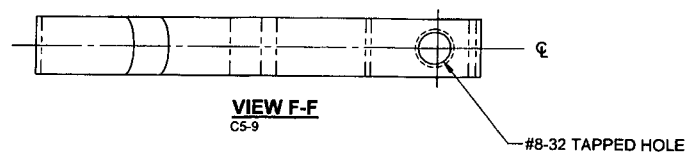
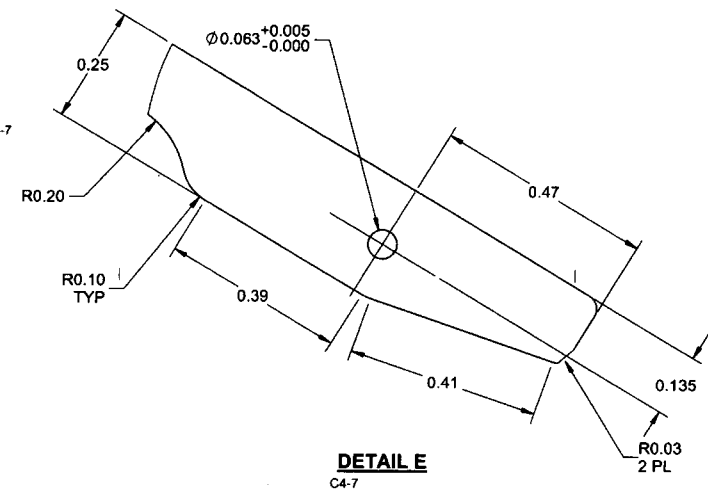
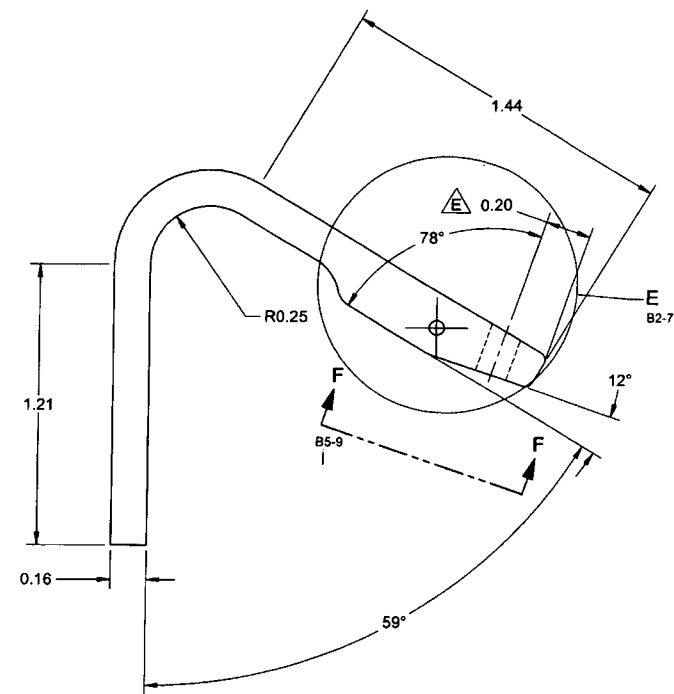
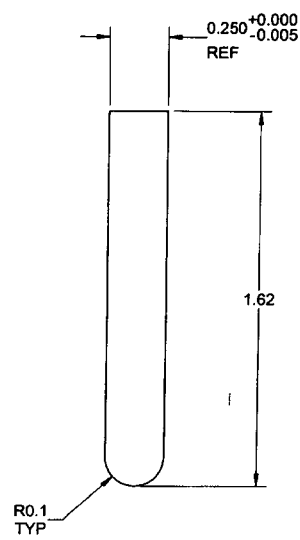
APPROVED

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	RF	DRAWING NO. D4410	REV. E SHEET 8 OF 12
MFG. APPR.	EPDMA	TITLE CO-PILOT COLLECTIVE HEAD	
APPROVED	HS		
DE APPR.	DS	SCALE NTS	
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



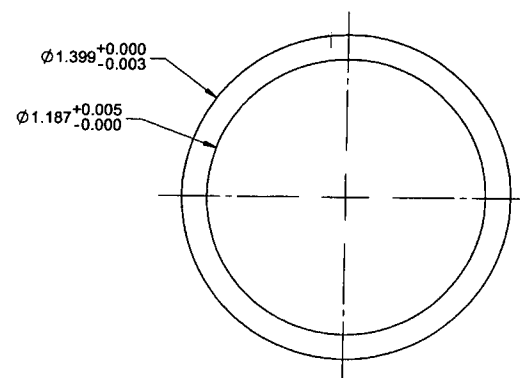
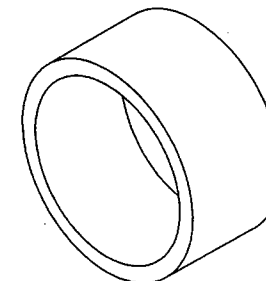
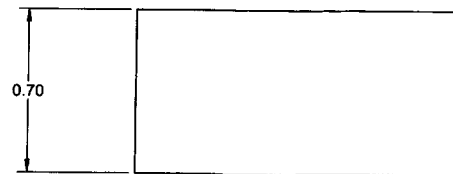
D4410-9 TRIGGER

RELEASED
A.L. 2015 JUL 02

- NOTES:**
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.250 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.250
 - 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.01 lbs

APPROVED	DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
	DRAWN	VS		
	CHECKED	RF	DRAWING NO.	REV. E
	MFG. APPR.	EPDMA	D4410	SHEET 9 OF 12
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
	DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1



D4410-13 212 SHIM

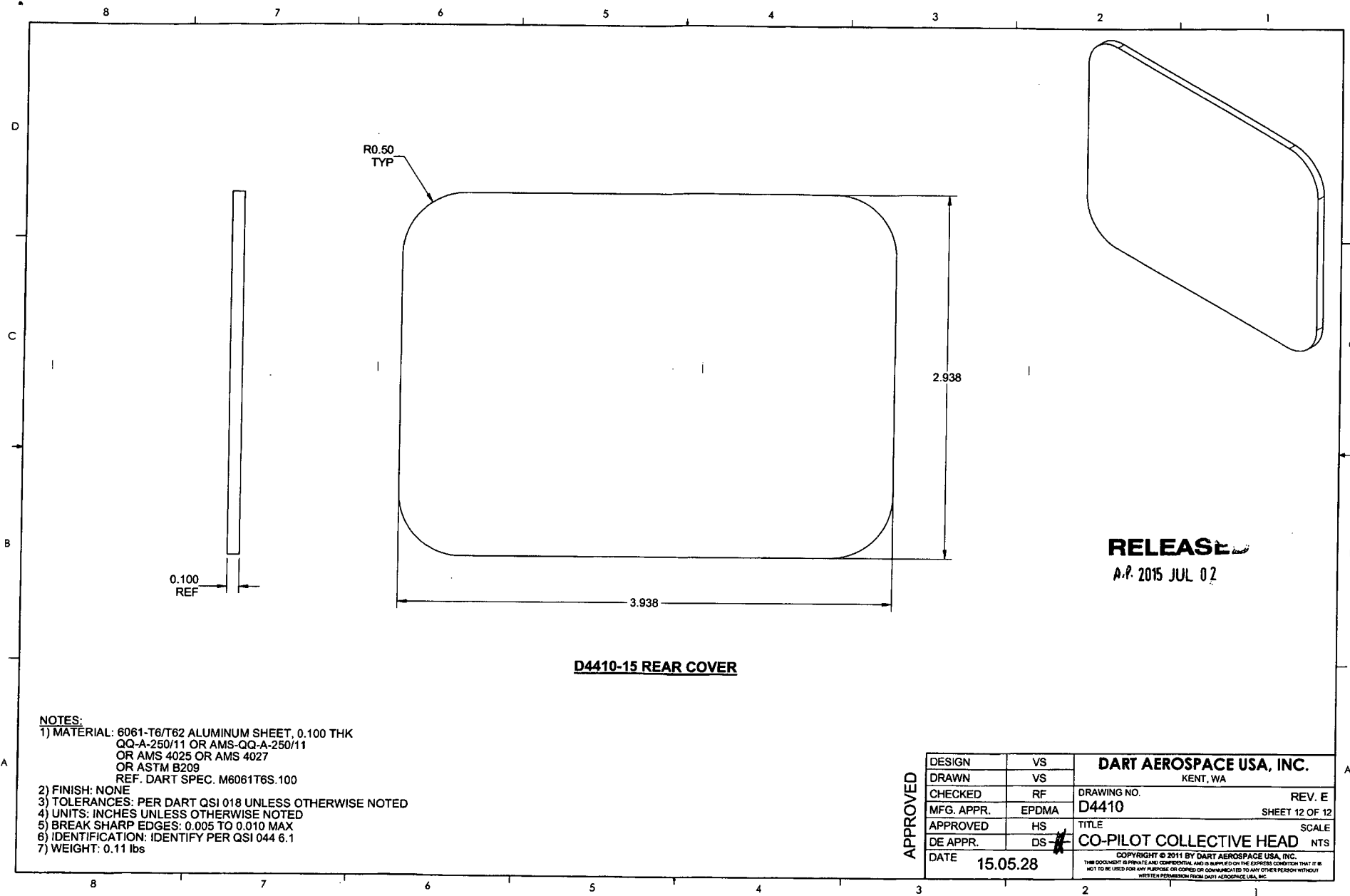
RELEASED
A.P. 2015 JUL 02

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6R1.500
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.03 lbs

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	EPDMA	D4410	SHEET 11 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



RELEASE
A.P. 2015 JUL 02

D4410-15 REAR COVER

- NOTES:**
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.100 THK
 QQ-A-250/11 OR AMS-QQ-A-250/11
 OR AMS 4025 OR AMS 4027
 OR ASTM B209
 REF. DART SPEC. M6061T6S.100
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.11 lbs

APPROVED	DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
	DRAWN	VS		
	CHECKED	RF	DESIGN NO.	REV. E
	MFG. APPR.	EPDMA	D4410	SHEET 12 OF 12
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
	DATE	15.05.28	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO30385

Purchase Order Date 11/6/2015

PO Print Date 11/10/2015

Page Number 1 of 7

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID

Contact Name

Vendor Phone 613-446-4544

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Terms

Net 30

Currency

CAD

Ship Acct:

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	------------------------------	---------------------	-------------------	----	--------------------------	---------------	----------------

Line Comments

Delivery Comments

Promise Date

1	138554	D4410-5 FACE PLATE REV.E	11/18/2015		4.00	\$31.25	\$125.00
---	--------	--------------------------	------------	--	------	---------	----------

Yes

11/18/2015

FINISH: BLACK ANODIZE PER MIL-A-8625F TYPE I / IB / IC / II / IIB CLASS 2

SP15-12-01

Line Total:

\$125.00

2	138600	D4821-1 WINDSHIELD DEFLECTOR REV.	11/11/2015		12.00	\$50.25	\$603.00
---	--------	-----------------------------------	------------	--	-------	---------	----------

Yes

11/11/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

****RUSH ORDER****

SP15-11-11

Line Total:

\$603.00

Note:

11/10/2015



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 64024

Date: 01-Dec-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
6 ea	Part: 646.2910 DEFLECTOR HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150833	Rev: N/C PO: PO30385	Line:
4 ea	Part: D4410-5 FACE PLATE BLACK ANODIZE MIL-A-8625 TYPE II CLASS 2 Job: 20150872	Rev: E PO: PO30385	Line: 8015-12-01
5 ea	Part: 646.3812 GUSSET BRACKET HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150873	Rev: PO: PO30385	Line:
5 ea	Part: 646.3813 STRUT BRACKET HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150874	Rev: N/C PO: PO30385	Line:
6 ea	Part: 647.0410 TUBE REV HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2	Rev:	



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 64024

Date: 01-Dec-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
	PRIME MIL-P-23377J TYPE I CLASS N PAINT IS SUPPLIED BY CUSTOMER Job: 20150875 PO: PO30385 Line:		
8 ea	Part: 647.7814 FWD BRACKET HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N PAINT IS SUPPLIED BY CUSTOMER Job: 20150876 PO: PO30385 Line:	Rev:	
8 ea	Part: 647.7815 FWD BRACKET HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N PAINT IS SUPPLIED BY CUSTOMER Job: 20150877 PO: PO30385 Line:	Rev:	
Certificate of Conformance A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY DATE: <u>1/12/15</u> CERTIFIED SIGNATURE: <u>[Signature]</u> <u>SD</u> 15-12-01			



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 64024

Date: 01-Dec-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via
Quantity	Description	
	RECEIVER SIGNATURE : _____	
	SP15-12-01	